

CLAIMS

1. A video processing apparatus comprising:

an imaging means for imaging an object through an optical system to obtain an electric signal through conversion and outputting a signal as a video data;

a display means for displaying a picture of said video data in a predetermined picture frame; a printing means for printing the picture in said picture frame of said video data;

a print size selecting means for selecting a print size of the picture to be printed by said printing means;

a pixel-number determining means for determining the number of pixels of said video data corresponding to the print size selected by said print size selecting means; and

a video data processing means for processing said video data based on the number of pixels determined by said pixel-number determining means so that the pixels of said video data output from said imaging means should be in one-to-one correspondence with the pixels of said video data printed by said printing means.

2. A video processing apparatus according to claim 1, wherein said pixel-number determining means determines the number of horizontal-direction pixels based on the head density of said printing means.

3. A video processing apparatus according to claim 1,

wherein said pixel-number determining means determines the number of vertical-direction pixels based on the transmission system of said video data.

4. A video processing apparatus according to claim 1, further comprising:

a horizontal and vertical cutting means for cutting the picture of said video data in the horizontal direction or the vertical direction based on the number of pixels determined by said pixel-number determining means to thereby generate a picture frame corresponding to said number of pixels on said display means.

5. A video processing apparatus according to claim 1, further comprising:

a horizontal and vertical cutting means for cutting the picture of said video data in the horizontal direction or the vertical direction based on the number of pixels determined by said pixel-number determining means to thereby print an image corresponding said number of pixels by said printing means.

6. A video processing apparatus according to claim 1, wherein said video data processing means uses the same sampling frequency for sampling the pixels of said video data output from said imaging means and for sampling the pixels of said video data to be printed by said printing means.

7. A video processing apparatus according to claim 1, wherein the pixels of said video data displayed on said display means are decimated in a predetermined ratio relative to the video data obtained by the image pickup of said imaging means.

8. A video processing apparatus according to claim 1, wherein said print size selecting means directly sets values by input using a key.

9. A video processing apparatus according to claim 1, wherein said print size selecting means selects one from a plurality of preset values.

10. A video processing apparatus according to claim 1, wherein said imaging means has a zooming function for adjusting the zooming operation of said optical system.

11. A video processing apparatus comprising:
an imaging means for imaging an object through an optical system to obtain an electric signal by conversion and for outputting said electric signal as a video data;
a storage means for storing said video data;
a character data generating means for generating a character data concerning control of said video data;
a display means for displaying a picture of the video data stored in said storage means and the character data generated by said character data generating means; and

a printing means for printing said picture displayed on said display means based on said character data,

wherein, when said picture and said character are displayed on said display means, said character is displayed with being rotated relative to said picture.

12. A video processing apparatus according to claim 11, wherein when the image of the object picked up by said imaging means is rotated by 90° in a predetermined direction and said picture and representations of said character displayed on said display means are rotated by 90° in a direction opposite to said predetermined direction, said character data generating means generates character data so that said characters should be displayed on said display means with being rotated relative to said picture in said predetermined direction by 90° .

13. A video processing apparatus according to claim 11, wherein said character generating means has a 90° -rotation font used for displaying characters on said display means with said characters being rotated by 90° relative to a scanning line direction of said display means.

14. A video processing apparatus according to claim 11, wherein said character generating means has a 90° -rotation font used for displaying characters on said display means with said characters being rotated by 90° relative to a scanning line direction of said display means and a normal font, and switches

said 90°-rotation font and said normal font depending upon positions of said imaging means and said display means.

15. A video processing apparatus according to claim 11, wherein said character data generated by said character data generating means is a control item for a printing of said printing means.

16. A printing apparatus for printing an image based on a source video data on a printing paper, comprising:

a storage means for storing said source video data;

a reading means for reading a video image stored in said storage means;

a printing means for printing an image based on the video data read out by said reading means on said printing paper; and

a control means for controlling said reading means and said printing means so that pixels of said source video data should be in one-to-one correspondence with pixels of the video data to be printed on said printing paper.

17. A printing apparatus according to claim 16, wherein said printing means comprises a head drive means for driving a head for printing said read-out video data on the printing paper and a paper feeding means for mechanically conveying said printing paper relative to said head.

18. A printing apparatus according to claim 16, wherein said controlling means controls a read sampling frequency of said reading means in response to the head density of the head.

19. A printing apparatus according to claim 16, wherein said controlling means controls a read sampling frequency of said reading means and a paper feed pitch of said paper feeding means in response to a head density of said head.

20. A printing apparatus according to claim 16, further comprising:

a print size selecting means for selecting a print size of an image to be printed on said printing paper, wherein said controlling means controls a read sampling frequency of said reading means and a paper feed pitch of said paper feeding means in response to the print size selected by said print size selecting means.

21. A printing apparatus according to claim 16, further comprising:

a print size selecting means for selecting a print size of an image to be printed on said printing paper, wherein said controlling means determines, in response to the print size selected by said print size selecting means, the number of pixels of a video data to be printed on said printing paper and controls a read sampling frequency of said reading means and a

paper feed pitch of said paper feeding means in response to the determined number of pixels and a head density of said head.

22. A printing apparatus according to claim 16, further comprising:

a print size selecting means for selecting a print size of an image to be printed on said printing paper, wherein said controlling means determines, in response to the print size selected by said print size selecting means and a transmission system of said source video data, the number of pixels of a video data to be printed on said printing paper and controls a read sampling frequency of said reading means and a paper feed pitch of said paper feeding means in response to the determined number of pixels and a head density of said head.

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Abstract

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ABSTRACT OF THE DISCLOSURE

It is an object of the present invention to provide a video processing apparatus which makes it possible to print a picture having an arbitrary size without forging an original picture. A video processing apparatus according to the present invention includes a print size selecting means 51 for selecting a print size of a printer 3 by selecting a size of a picture frame, a CPU 43 for determining the number of pixels of a video data corresponding to the selected print size, and a memory controller 33 for processing the video data in accordance with the number of pixels so that pixels of a video data output from a camera 1 should be in one-to-one correspondence with pixels of a video data to be printed by the printer 3. It is not necessary to subject the original picture to video processings such as a decimating processing, an interpolation processing or the like. Therefore, it is possible to obtain a printed picture having an arbitrary size without forging an original data as required when an attesting photograph is taken.